

REMARKS

This Application provides for *inter alia* five-membered ring compounds which exhibit favorable effects on the properties of liquid-crystal mixtures even when admixed in small amounts.

It is believed that no fee is required for the consideration of this Amendment. However, if an additional fee is due, the Director is authorized to charge such fee, or credit an overpayment to Deposit Account 50-0320.

Further to the provisional election of species made during a telephone conversation with the Examiner on 3/30/04, Applicants affirm the election to prosecute the invention of Example 1 on page 57, claims 1-7 (item *ii* in Claim 1, i.e. where T is furan-2,5-diyl or furan-2, 4-diyl). Applicants continue to traverse the requirement for an election of species for reasons of record, if the requirement is being used as a restriction requirement and the Examiner will not proceed to examine other species, should the elected species be found allowable. It is Applicant's understanding that upon the allowance of a generic claim, Applicants will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. 1.14.

Claims 1-12 are pending. In order to advance prosecution and overcome rejections, amendments to claims 1 correct minor informalities and specify the R² designation for the part *ii* of the claim. Claim 11 is cancelled without prejudice, admission, surrender of subject matter or intention of creating estoppel as to equivalents. Claims 4 and 5 are corrected to remove multiple dependencies, and finally, claim 8 is amended to exclude methyl and tert-butyl from the subset of alkyl and R designations. As the excluded combinations are described in the specification on page 49, no new matter had been added. These amendments do not affect the scope of the

claims, and therefore these changes do not add new matter or affect the application of the doctrine of equivalents.

The object of this invention is to provide five-membered ring components for use in ferroelectric liquid crystal mixtures. Even when administered in small amounts, the instantly claimed compounds exhibit favorable effects on certain properties of the liquid-crystal mixtures, such as, for example dielectric anisotropy, melting point, switching behavior, the tilt angle values and the temperature dependence of the tilt angles. Moreover, the instantly claimed compounds may be used in ferroelectric liquid crystal mixture, in particular chirals-mectic mixtures, which are operated in inverse-mode or in displays having active matrix elements. The use of the instantly claimed compounds is further preferred in the mixtures for active matrix LCD in which the chiral-smectic liquid crystal layer forms a monostable monodomain.

Claim 1 is rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Brown et al. ("Brown", Mol. Cryst., 1989, Vol. 173, pp.121-140). Since Brown does not teach instantly claimed furan compounds, it cannot anticipate the present claims and the withdrawal of the rejection is requested.

The Office Action states that Brown "discloses a three-ring ester containing furan" (Office Action page 4). Theses furan derivatives, however, have only one substituent in the 2-position of the furan compound. In contrast, the instantly claimed furan compounds exhibit two substitutents in the 2, 5 and 2, 4 positions respectively. Hence, Brown does not disclose *inter alia* instant furan derivatives and cannot anticipate the present claims.

Claims 2-7 are rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Brown et al. Since Brown does not suggest instant furan derivatives, the rejection cannot

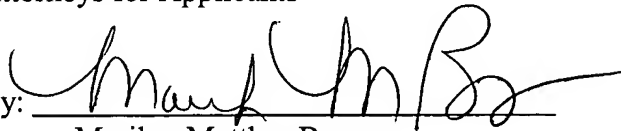
establish a *prima facie* case of obviousness. Accordingly, reconsideration and withdrawal of the rejection are requested.

Applicants urge that Brown provides *inter alia* structurally different furan derivatives. Specifically, in contrast to the instant furan compounds with two substituents in 2, 5- and 2, 4-positions of the furan compound, Brown provides for furan compounds with only one substituent at the 2-position. Moreover, Brown only discloses the phase behavior of the compounds but gives no indication of a use of structurally different components in ferroelectric liquid crystal mixtures which are operated with active matrix elements, especially in monostable monodomains. Accordingly, it is respectfully suggested that one skilled in the art would not have expected from teachings of Brown that furan compounds according to the present invention would exhibit favorable properties when admixed in ferroelectric liquid crystal mixtures and may be preferred for use in mixtures for active matrix LCD in which the chiral-smectic liquid crystal layer forms a monostable monodomain. Hence, Brown does not render the instant invention obvious.

In view of the foregoing reconsideration and withdrawal of these rejections are requested and favorable action is earnestly solicited.

Respectfully submitted,

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